



United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 2890
Washington, D.C.
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NATIONAL ECONOMICS BULLETIN NO. 39-9-8

SUBJECT: FORMS - ECONOMIC EVALUATIONS, INTERVIEW INFORMATION

Purpose. To transmit and explain the forms, approved by the Office of Management and Budget, that are to be used to record information, collected by interview, on flood prevention, irrigation, and drainage benefit evaluation.

Expiration Date. This bulletin expires on September 30, 1979.

Background. The completed forms are to be retained in the project file as part of the supporting information for the economic evaluation. Destroy forms presently used to record this information since they have not been approved by the Office of Management and Budget. Information collected prior to the date of this bulletin is not affected.

The following forms are covered by this bulletin:

- (1) SCS-WS-1, Flood Damage - Agriculture
- (2) SCS-WS-2, Flood Damage - Residential
- (3) SCS-WS-3, Flood Damage - Commercial - Industrial
- (4) SCS-WS-4, Flood Damage - Transportation Utilities
- (5) SCS-WS-5, Irrigation Questionnaire
- (6) SCS-WS-6, Drainage Questionnaire

These forms contain instructions for recording the information collected during field investigations. General information on the use of flood damage forms is in the Economics Guide.

The confidential nature of the information collected from respondents in the watershed requires that their identity be protected (5 U.S.C. 552 (b) (4)). This requires coding the name and location of the respondent on the form. The key to the identity and location code(s) should be kept separate from the completed forms.

A copy of each of the forms is enclosed. Order enough to meet your needs from Central Supply.

WILLIAM M. JOHNSON
Deputy Administrator
for Technical Services

Enclosures



WO - Limited
SO
TSC

SCS-WS-1
JUNE 1972
FILE CODE WS-14

FLOOD DAMAGE - AGRICULTURE

FORM APPROVED
OMB NO. 43-13892
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Respondent _____ Years on Farm _____ Farm Location _____ Watershed _____ Reach _____
Flood Date _____ (Mo.) _____ (Yr.) _____ No. of Acres Flooded _____
How frequently do floods of this size occur _____ by largest flood _____

Damage to Crops and Pasture From Flood of Above Date

Land Use	No. of Acres	Depth of Flood (Ft.)	Duration of Flood (Hrs.)	Expected Yield/Acre If No Flood	Yield/Acre After Flood	Alternate Crop & Yield/Acre	Additional Production Practices Performed Due to Flood	Production Practices Not Performed Due to Flood

REMARKS

Other Agricultural Property Damage From Flood of Above Date

Item	Type	Quantity	Depth of Flood	Estimated Damage (Dollars)

Estimated Land Damage From Flood of Above Date

Kinds	Acres	Productivity Loss	Remarks

Date of Interview _____
By _____

Agriculture Flood Damage Questionnaire

Instructions

The purpose of this questionnaire is to obtain information from landowners and operators to be used with other data in the evaluation of watershed problems and needs and project effects.

List the name of the person being interviewed, the location of the farm or ranch and the name of the watershed under study.

Give the month and the year of a flood the respondent can remember. Show his estimate of the number of acres on this farm or ranch that were flooded by that flood.

Show the land use by acres of the area flooded when that flood occurred. Show the maximum depth of that flood and length of time flooding occurred. Show the expected yield for each land use if no flood had occurred, and the yield after the flood. If the yield after the flood was caused by delayed planting from a prior flood indicate with a star. Name the alternate crop and yield if applicable. List the additional production practices made necessary by the flood occurrence. List the production practices that did not need to be performed due to crop loss by flood. Use remarks section for additional space if needed.

List the other agricultural property by types damaged by that flood. Show the quantity flooded by depths of flooding. Show the respondent's estimate of damage for each depth, type or item and indicate which is the reference.

List the respondent's estimates of land damages.

List the normal land use of the total flood plain.

List the dates the farmer performs the indicated production practices when flooding is not a problem.

LAND USE IN TOTAL FLOODPLAIN

Crop	No. of Acres	Usual Date for Production Practices				Date too late to Plant
		Land Preparation	Planting	Cultivating	Harvest	

1. What changes in land use have you made due to floods? _____
2. What changes would you make if the frequency of flooding were reduced by half? _____
3. How often do large floods occur? (If the flood described above is a large flood, change this question to small floods.) _____
4. During what seasons are floods most common? _____
5. In addition to the loss in yield described above, was there any damage to quality of crops? _____
6. What damage did this flood do to roads and bridges nearby? _____

Use other side for REMARKS.

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FLOOD DAMAGE - RESIDENTIAL PROPERTIES

Watershed _____ State _____

Reach _____ Interviewer _____ Date _____

Occupant _____

Address _____ Years lived here _____

Times residence flooded: No. _____ Dates _____

Date of specific flood event _____ Hrs. of advance warning received _____

Depth of water in basement _____

Describe source of floodwater (through windows, walls, basement drains, etc.)

Depth of water on or above first floor _____

Depth of water on grounds or lawn _____

Depth of water in garage _____

Depth of water in other buildings _____

Depth of water in automobiles _____

Location of automobiles when flooded

Depth below the above flood at which damages begin _____

**Times residence
flooded**

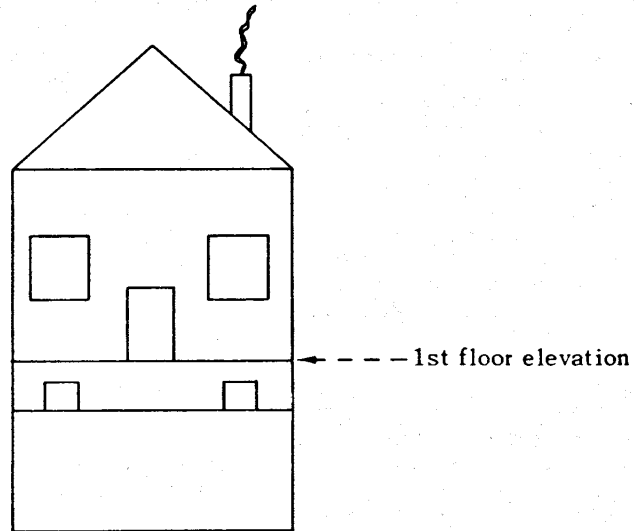
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No. - Number of times

Dates - Month, day, and

FLOOD DAMAGE - RESIDENTIAL PROPERTIES

Show height of experienced flood stage (depth) on the residence. Denote basement windows and depressed basement entranceways as related to first floor elevation and depth of inundation by specific flood event.



Class of Structure (check one)	Type		
	Frame	Masonry	Other (specify)
Single story, no basement			
Single story, with basement			
Two story, no basement			
Two story, with basement			
Split level			
Mobile home			
Other (specify)			

This standard drawing is intended to be used in numerous ways. Any use that can be made of this drawing that serves the enumerator's purpose should be shown. Any penciled modifications, as necessary, should be made.

Class and type
of structure
(check one)

- Check the one block which most accurately describes this residence. If the "other" block under "Type" is checked, specify, by footnote, what this "other" refers to.

FLOOD DAMAGE - RESIDENTIAL PROPERTIES - APPRAISAL

Item	Specific Flood Event and Dates of Stages Above and Below							
	Specific Flood Event							
	Extent of Damage (Dollars)(Specify price base if different from flood year)							
Structure -								
House								
Outbuildings								
Driveways and walks								
Contents -								
Basement:								
Furniture								
Appliances								
Personal belongings								
First Floor:								
Furniture								
Appliances								
Personal belongings								
Lawn								
Vehicles								
Other (specify)								
Cleanup (Lawns, driveways, basement, floors, etc.)								
Subtotal - Direct Damages								
Emergency measures of evacuation, etc.								
Loss of income								
Other (specify)								
Subtotal - Indirect Damages								
Total Damages								

Size of residence _____ sq. ft.

Market value of residence (do not include lot) \$ _____

Replacement value of contents \$ _____

Remarks:

All information in the body of this table should be in terms of dollar damage estimates. Physical effects should be described in the "remarks" section of the table.

Appraisal of Flood Damages:

Specific flood event and stages above or below

- The specific flood event is the historical flood for which detailed damage estimates are to be recorded in one column of this table. Stages above and below the specific flood event refer to floodwater depths in or at this higher (above) or lower (below) than that experienced from the specific flood event. Stages above and below the specific flood event should, as a minimum, include large, medium, and small flood events. The large flood event should at least equal the 100-year flood. These damage data may be related to the first floor elevation of the house or may be obtained on a frequency-depth of inundation type basis. Use these columns to fit your method of obtaining flood damage for a range of flood frequency events.

Extent of Damage - Dollars - Give a detailed dollar listing of damage for each identifiable item changed. When damage estimates are obtained from the person being interviewed, it is important to know what year his estimates are related to if other than year of flood.

Indirect Damages:

Emergency measures for evacuation

- Dollar value of labor, equipment, utilities, and time expended in attempting to prevent flood damages from the specific flood event.

Loss of income

- Income lost by occupant and family either to prevent flood damages or for clean-up activities, that has not been accounted for in the direct flood damage estimate above.

Other (specify)

- Name other types of indirect damage which fit under the indirect damage category for this watershed flood plain occupant, such as loss of refrigerated foods due to power failure, added medical costs due to flooding, added travel expenses caused by increased travel route, added living expenses because of flood damage to residence, etc.

Size of residence

- Give approximate living area of home in terms of square feet; e.g., 30' x 60' = 1800 sq. ft.

Market value of residence (not including lot)

- Approximate value of house and outbuildings exclusive of the value of the land area (lot) on which they are located.

Replacement value of contents

- Give the approximate cost to the dweller of replacing, with equivalent facilities, the furniture, appliances, and personal belongings normally contained in this home.

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FLOOD DAMAGE--COMMERCIAL--INDUSTRIAL

Watershed _____ State _____ Reach _____

Interviewer _____ Date _____

Type of Business _____ Address _____ Owner _____

Structure:

Construction: Frame ☐ Brick ☐ Metal ☐ Other (specify) _____

Market Value (do not include land) \$ _____

Size: Basement _____ sq. ft. 1st Floor _____ sq. ft. No. of Floors _____

Value of Contents: Basement \$ _____ 1st Floor \$ _____ 2nd Floor \$ _____
(estimated) Other \$ _____

1st Floor Storage (per cent stored in relation to elevation):

0.0 - 1.0 ft. _____ % 1.1 - 3.0 ft. _____ % 3.1 - 5.0 ft. _____ % 5.1 ft. and over _____ %

Number of Employees _____ How Often Do Damaging Floods Occur? _____

Date of Flood _____ Type of Flood: Backwater ☐ Flowing ☐

Depth of Flood: Grounds _____ ft. Basement _____ ft. 1st floor _____ ft. 2nd Floor _____ ft.

	Estimated Damages (Dollars)			Remarks
Grounds -- Parking lots, walks, signs	X X X	X X X	\$ _____	(Loss prevented by evacuation, emergency preparations, etc.)
Lawns, shrubs	X X X	X X X	_____	
Structure -- Foundation	X X X	X X X	_____	
Walls	X X X	X X X	_____	
Other	X X X	X X X	_____	
Contents -- (Stock)	Basement	1st Floor	Other	
Merchandise	\$ _____	\$ _____	\$ _____	
Equipment	_____	_____	_____	
Records	_____	_____	_____	
Misc. (specify) _____	_____	_____	_____	
Other -- Loss of Business	X X X	X X X	\$ _____	
Evacuation-Reoccupation	X X X	X X X	_____	
Flood proofing	X X X	X X X	_____	
Employee Wages Lost	X X X	X X X	_____	
Misc.	X X X	X X X	_____	
Totals	\$ _____	\$ _____	\$ _____	
TOTAL LOSS FOR FLOOD			\$ _____	

Estimated Damages at Higher or Lower Stages Than This Flood

Higher 1' \$ _____ 2' \$ _____ 3' \$ _____ 4' \$ _____ 5' \$ _____

Lower 1' \$ _____ 2' \$ _____ 3' \$ _____ 4' \$ _____ 5' \$ _____

Explanatory Notes

1. Type of Business -- Identify as retail grocery, wholesale drug, lumber yard, music store, toy manufacturing, etc.
2. Market Value of Structure -- This excludes land. Data may be from appraisers, tax records, owners.
3. Value of Contents -- Includes stock, merchandise, equipment, etc. If this varies significantly by season, indicate in Remarks. Prorate by location. Other would include outside or that stored in minor building such as lumber yards.
4. 1st Floor Storage - Percent of contents stored related to elevation -- This should account for 100% of 1st floor contents by height stored above the 1st floor elevation.
5. Number of Employees -- This includes all full and part-time employees. If part-time, identify as such.
6. Damages - Structure -- If repairs not made, estimate damage. If repairs made other than year of flood, indicate year. Includes repainting, redecoration, etc.
7. Damage - Contents -- Other refers to that outside major buildings.
8. Damage - Other -- Evacuation-reoccupation includes moving goods, temporary space leased, etc. Wages lost would be for employee time in which pay was not received. Misc. would include such things as clean-up.
9. Estimated Damage at Higher or Lower Stages -- This to be completed by interviewer, owner or both.
10. Remarks -- Use to clarify any data obtained or additional information not specifically covered.

Explanatory Notes

1. Location of damage -- This may be by reach or other meaningful terms to identify where the damage occurs.
2. Respondent -- This would be the individual providing the information.
3. Institution Represented -- This may be the County Highway Department, railroad, utility company, etc.
4. Item Damaged -- Specify item and kind of item such as gravel road, steel bridge, main railroad line, electric generating plant, etc.
5. Column (1) -- This is to reflect the depth of water either over or below item damaged such as road surface, bridge deck, etc.
6. Column (2) -- This is to show whether damage consisted of washing out a bridge, eroding of abutments, gravel washed off road surface, flooding pumps, breaking utility poles, etc.
7. Column (4) -- This includes loss of business, wage loss, rerouting costs, emergency measures, cost of preventing damage, etc. Explain under remarks.
8. Column (6) -- This is not for a specific flood but is related to estimated damages if flood stages were either higher or lower. This estimate may be by respondent or technicians or both.
9. Bridge Information -- This data is to reflect without project conditions. This data may be useful if the replacement period and cost of replacement is affected by project conditions. It is most applicable to bridges in close proximity of structures.
10. Column (8) -- This is to show size of bridge opening and whether steel, timber, etc.
11. Remarks -- Use to clarify any data obtained or additional information not specifically covered.

IRRIGATION QUESTIONNAIRE

Instructions

- | | |
|--|--|
| <u>Watershed</u> | - Give name of watershed as contained in the watershed application. |
| <u>Respondent</u> | - This is the person being interviewed and normally will be the person who lives on this farm. |
| <u>Years on Farm</u> | - Number of years the respondent has lived on or worked this farm. |
| <u>Location</u> | - Give the mail box address and preferably the legal description of this farm. |
| <u>Interviewer</u> | - Person conducting the interview. |
| <u>Date of Interview</u> | - The date this interview is being conducted. |
| <u>Soil Association
or Group</u> | - Denote the soil group or soil association for which these data apply on this farm. |
| <u>Question #1</u> | - Check the block which denotes the type, or types, or irrigation being practiced on this farm. |
| <u>Question #2</u> | - Obtain estimates from the respondent on acres farmed and typical yields for normal, high, and low water supply years. |
| <u>Question #3</u> | - Obtain from the respondent his choices in determining which crops receive preference in rationing a short water supply. |
| <u>Question #5</u> | - For each soil group or association record the respondent's estimate of acres and yield for each crop. |
| <u>Question #6</u> | - This information will identify added cost items, over and above project costs, that will have to be incurred by the landowner to realize the full project effects. |
| <u>Questions #7 & #8</u> | - This information might indicate possible savings in costs as a result of installing the watershed project. |
| <u>General Comments
and Observations</u> | - Specify any other pertinent information which has significance to the evaluation of the project irrigation measures. |

DRAINAGE QUESTIONNAIRE

Watershed _____ Interviewer _____ Date _____

Future Production Without Drainage			Future Production With Drainage			Remarks
Crop	Acres	Yield/Acre	Crop	Acres	Yield/Acre	

1. What are your drainage problems? _____
2. How often are you unable to plant a crop due to lack of adequate drainage? _____
3. How often do you need to make a separate planting due to lack of adequate drainage? _____
4. How often are you unable to harvest a crop due to lack of adequate drainage? _____
5. How much lime do you spread on problem area? _____
6. Would you use a different type and rate of fertilizer with adequate drainage? Yes ☐ No ☐
7. If yes, what changes would you make? _____

Remarks: _____